CHAPTER 12

DATA QUALITY AUDITS

A. INTRODUCTION

Data-driven systems, such as OASIS data collection and outcome measurement, depend on the accuracy of source data describing patient health status. It follows that minimizing data errors that could affect accuracy of clinical data or outcome analyses is a necessary condition. This function is the responsibility of the agency since, ultimately, agency-level outcome reports reflect the data agencies input into the system. Internal staff development and training must focus on data accuracy not only at the start-up of OASIS data collection, but on a continuing basis. We recommend that data quality audits be conducted in agencies on a routine basis. Some data audit activities should be conducted monthly, while others can be conducted at less frequent intervals, such as quarterly.

The following guidelines provide a method for monitoring the quality of data in an agency. Types of audits, their recommended frequency, and categories of staff members (to conduct data audit activities and summarize findings) are suggested. If problems are identified, it is also recommended that the agency develop and implement a plan to correct data quality problems. Table 12.1 displays the data quality audit approaches discussed in this chapter and summarizes the purpose, frequency, and procedures for each. Additional detail on each audit activity and an approach for summarizing findings are also included.

B. MONTHLY AUDIT ACTIVITIES

1. Clinical Record Audits

Clinical record audits allow an agency to monitor the validity of OASIS data. The quality check assesses the congruence of OASIS data with other patient status information found in the clinical record. This audit allows an agency to check for "gaming" of data by clinicians. Gaming occurs when clinicians demonstrate a systematic bias in describing patient status. Most often this will take the form of exaggerating illness or disability at start of care to enhance the justification for providing services and, under prospective payment, to maximize payment. There may also be a concomitant bias in the opposite direction for a discharge assessment, driven by a desire to make patient outcomes appear in a more favorable light or simply as a justification for discharge (e.g., the goal of reaching a certain level of functioning has been met).

To conduct a clinical record audit, an abbreviated record review can be conducted for at least five new admissions and five patients discharged from the agency (but not due to an inpatient facility admission). Records should be

TABLE 12.1: Data Quality Audits.

Audit Type	Purpose	Frequency	Overview of Procedure	Performed By
Clinical Record Audit	To verify accuracy of OASIS patient status items compared to other related patient documentation	Monthly	Review at least five SOC records and five discharge records. Compare OASIS items to other documentation from the SOC or discharge visits and from other visits surrounding SOC or discharge.	QI coordinator or clerical staff
Data Entry Audit	To verify accuracy of OASIS data that were data entered to data in the clinical record or to data entered at another time	Monthly	Either: (1) Obtain a hardcopy of OASIS data that were entered for five patients. Compare to OASIS items in clinical record; or (2) Data enter OASIS information for five patients twice. Compare data entered the first time to data entered the second time for each patient.	QI coordinator, IS/IT coordinator, or data entry staff
Clinical Audit Visits	To verify accuracy of OASIS assessment data, i.e., evaluate assessment methodology and assessment skills of clinical staff	Quarterly	For at least three or four patients, a supervisor or peer auditor attends the SOC visit. The auditor completes OASIS items while the care provider conducts the assessment and completes SOC paperwork. OASIS items are compared for consistency between auditor and care provider.	QI coordinator, clinical supervisor, or clinical staff

randomized, in order to evaluate data quality for a cross-section of patients and care providers. The selection process might be as follows:

- Choose a standing date for record selection (for example, the first Tuesday of every month). On that day each month, alphabetically compile a list of all skilled care patients admitted to the agency for the previous month. For example, if the record selection date for February falls on February 3rd, compile a list of all patients admitted to the agency from January 3rd to February 2nd.

- Count the number of patients on the list. Divide that number by five, rounding down to the nearest whole number. For example, if there are 42 patients on the list, $42 \div 5 = 8.4$, which would be rounded to 8. This

number, n, will be used to select records. Divide this number by 2 to obtain the starting point, m, for selecting records.

- Count from the first patient alphabetically, select the mth patient, and select every nth patient after that. Using the above example, you would select the 4th person and then every 8th person on the list for record review.

The same procedure should be used to select records for discharged patients. Compile a list of patients discharged from the agency within the previous month. Divide the number of patients by five, and use that number (n) to select patients for record review.

In the event that you have fewer than five patients admitted to or discharged from your agency, review all records.

2.   Procedure for Clinical Record Audits

For new admissions, review the start of care (SOC) OASIS items and compare to other admission documentation and two or three subsequent visit notes, if they occur within the first week after SOC. In addition, if care providers from two disciplines perform assessments on the patient within one week of SOC (e.g., registered nurse conducts comprehensive assessment visit and completes OASIS items; the physical therapist visits two days later and evaluates the patient), the documentation should be compared. Reviewers should evaluate whether any discrepancies between the SOC OASIS assessment and the other documentation are sufficiently significant to indicate a data quality problem. For example, if the SOC OASIS items indicate that the patient is fully independent in ambulation, but other documentation indicates that the patient needs assistance when walking, a data quality problem exists. Assess for any discrepancies between sociodemographic items (e.g., patient ID number or age) in addition to discrepancies in clinical assessments (ICD codes, all clinical assessment OASIS items).

The records for discharged patients should be reviewed in the same manner. All discharge OASIS patient status items should be compared to other discharge information as well as to the previous two or three visit notes (if those visits occur within the same week of discharge). If there are large differences in descriptions of the patient, a potential data quality problem exists.

If differences are found that cannot be explained by other documentation in the clinical record, the care provider who completed the OASIS should be contacted to determine if the discrepancies were real (e.g., the patient did change significantly between the SOC visit and a visit the next day) or if an error was made when recording OASIS data. If data quality problems exist, the problems can be corrected. If clinical documentation must be amended, this should be done

according to agency policy. Any corrections to OASIS data in the clinical record must also be reflected in the OASIS database maintained by the agency, and if data submission has already occurred, a correction must be submitted to the State.

3.   Data Entry Audits

Data entry audits allow agencies to monitor the accuracy of data entry. Data entry errors in fields such as birth date or health insurance number are often detected through other agency procedures (e.g., billing -- if the data entry software communicates with other agency systems), while patient status data are not typically subjected to such verification. Such errors, however, can affect outcome analyses and should be monitored.

To conduct a data entry audit, a small sample of Medicare and/or Medicaid (skilled care) patient records should be checked at monthly intervals. In this evaluation, the clinical documentation is compared to the OASIS data that was entered to assess for data entry errors. This can be done by visual inspection or by double data entry, where the same record is data entered twice.

4.   Procedure for Data Entry Audits

From the monthly list of Medicare and Medicaid patients admitted to the agency, select at least five records. The sample records need not be randomly selected, but if more than one person is responsible for data entry, some records entered by each staff member should be assessed. These may be the same records you use for the clinical audit. Obtain a printout of the information that was data entered or view the data online (the procedure for doing this will vary, depending upon the software you choose). Compare the response to each OASIS item in the clinical documentation with the computer printout or screen display of entered data. An alternative method is to have two staff conduct data entry of the same records independently and to compare the data records item by item.[1]

If discrepancies exist between the data that were entered and the OASIS items in the clinical record OR between the OASIS items that were data entered twice, it is important to follow up with appropriate personnel. The agency database should be corrected and if necessary a correction should be submitted to the State. If data entry errors appear to be pervasive, a plan of action to remedy the problems should be developed and implemented.

---

[1]The exact mechanism for accomplishing double data entry will depend on the data entry software your agency uses, and may require some database programming at the agency or by your vendor. HAVEN, for example, does not directly support double data entry, although it can be accommodated by a HAVEN user with some expertise in database management.

C.   QUARTERLY AUDIT ACTIVITIES

1.   Clinical Audit Visits

Clinical audit visits provide an opportunity to verify the quality of patient status data collected by clinicians. It is recommended that in each quarter agencies conduct supervisory (or peer) audit visits to at least three to four patients. These audit visits should occur at the admission comprehensive assessment visit. Within a one-year period, each clinical staff member of an average-sized agency thus can receive an audit visit. The supervisor or peer auditor should complete the SOC OASIS items while observing the care provider conducting the SOC visit. The care provider and auditor should not discuss OASIS items between themselves during the visit. The QI coordinator (or designated person) then compares each item on the SOC OASIS items completed by the care provider to the OASIS items completed by the auditor. Discrepancies should be noted. Any differences between OASIS items should be discussed jointly by the care provider and auditor to determine the reasons for the differences and to ensure that care providers fully understand the OASIS items. It is not necessary to select a random sample of patients for the audit visits, but the QI coordinator or QI team should ensure that a variety of patients and care providers are represented.

D.   SUMMARIZING AUDIT ACTIVITIES

1.   Documentation

Agencies should summarize findings from all audit activities as they are completed. Because these audit activities will be an ongoing quality monitoring activity, it may be helpful to include summaries of findings in quarterly QI reports. If data quality problems are identified from the audit activities, investigations should be conducted into the cause(s) of the problems, and action plans developed and implemented to resolve the problems. Approaches to assure that accurate patient-level data are utilized to describe patient status and to compute outcome measures increase the likelihood that agency-level outcome reports accurately describe the effectiveness of patient care.

2.   Attachments

The attached worksheets may be helpful to you in summarizing your findings, but there are no requirements for their use. Agencies may develop their own summary forms or modify current monitoring forms to include the data quality audit results.

Attachment A: Monthly Summary of Clinical Record and Data Entry Audit
Activities

Attachment B: Summary Report of Clinical Audit Visit

Attachment C: Quarterly Summary of Data Quality Audit Activities

FREQUENTLY ASKED QUESTIONS

1. **Must the primary and secondary diagnosis codes reported on the OASIS match those on the 485 and the UB-92?**

   With the advent of the prospective payment system (PPS) for Medicare patients on October 1, 2000, the payment rate for a 60-day episode of home health care was determined from OASIS data. The specific items used in this determination include M0230 (Primary Diagnosis) and M0240 (Other Diagnosis). While PPS did not change the policies developed over the years by Medicare and its fiscal intermediaries for home health, increased emphasis on accurate diagnosis coding resulted from the implementation of this payment approach. Unless ICD coding sequencing requirements provide clear justification for alternatives to traditional Medicare diagnosis reporting conventions, agencies should code as primary the diagnosis most related to the plan of care (also following OASIS requirements). The codes for all diagnoses (primary and secondary) would be expected to be the same across all associated agency records, including physician orders and billing documents.

2. **Will CMS require our agency to submit summaries of our data quality audit activities? What if we want to develop our own approaches to monitoring data quality?**

   No plans are under development to require agencies to submit summaries of data quality audit activities. Because the regulations contain a standard addressing the accuracy of encoded OASIS data, the State survey process for HHAs is likely to include review of OASIS data collected in comparison to those data encoded and transmitted to the State. In conjunction with this standard, a surveyor is likely to be particularly interested in the agency's own data quality monitoring efforts. Including this activity as part of the overall agency quality improvement activities conveys a message to staff of the importance of data quality to patient care at this agency.

   Similarly, an agency that develops its own approach to monitoring data quality is also conveying a powerful message to staff about the importance of high quality data. Forming a team to develop such approach(es), with representation of clinical and data entry staff, should result in unique approaches that are extremely appropriate for the agency. The data quality monitoring approaches proposed in this chapter are merely suggestions; agencies should feel free to adapt or completely redesign these approaches. What is important is an emphasis on high-quality data -- only such data will provide the information that is meaningful for the agency.

ATTACHMENT A TO CHAPTER 12

MONTHLY SUMMARY OF CLINICAL RECORD AND DATA ENTRY AUDIT ACTIVITIES

Clinical Record Audits

Record #	SOC or D/C	Inconsistencies Found?	Follow-Up Needed? *
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Data Entry Audits

Record #	SOC or D/C	Inconsistencies Found?	Follow-Up Needed? *
1.			
2.			
3.			
4.			
5.			

---

*Please document follow-up on a separate page and attach.

ATTACHMENT B TO CHAPTER 12

SUMMARY REPORT OF CLINICAL AUDIT VISIT*

Clinical Staff Member: _____

Auditor: _____

Patient Name: _____

Patient I.D. #: _____

Responses where OASIS Responses Differed: _____

Provide a brief summary of follow-up activities:

_____

*Please document follow-up on a separate page and attach.

ATTACHMENT C TO CHAPTER 12

QUARTERLY SUMMARY OF DATA QUALITY AUDIT ACTIVITIES

Summary of Monthly Clinical Record Reviews for:

_____
month

              # Records Reviewed   _____

              # Records with Inconsistencies   _____

Brief summary of follow-up activities:

Summary of Monthly Clinical Record Reviews for:

_____
month

              # Records Reviewed   _____

              # Records with Inconsistencies   _____

Brief summary of follow-up activities:

Summary of Monthly Clinical Record Reviews for:

_____
month

              # Records Reviewed   _____

              # Records with Inconsistencies   _____

Brief summary of follow-up activities:

Summary of Monthly Data Entry Audits:

Month 1 _____:

Month 2 _____:

Month 3 _____:

Summary of Clinical Audit Visits:

Patient #   Inconsistencies Found:

1.

2.

3.

4.

5.

Brief summary of follow-up activities:

Overall Summary of Data Quality Audits:

Plan of Action Needed: No ☐   Yes ☐   If <u>Yes</u>, attach Plan of Action